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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,320	01/10/2002	Lars Jansson	YAMAHS.523APC	2320

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EXAMINER

VANAMAN, FRANK BENNETT

ART UNIT	PAPER NUMBER
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3618

DATE MAILED: 04/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/889,320

Applicant(s)

JANSSON ET AL.

Examiner

Frank Vanaman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-54 is/are pending in the application.
- 4a) Of the above claim(s) 25-30 and 43-54 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 23,24 and 31-42 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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Election/Restrictions

1. Applicant's election with traverse of Group I and Species II in Paper No. 9 is acknowledged. The traversal is on the ground(s) that there is no serious burden on the examiner to examine a plurality of inventions in a single application. This is not found persuasive because the statutory basis for a restriction requirement is not based on the burden on the examiner, rather it is based on the granting of a patent for a single invention. Inasmuch as applicant has not provided any evidence or arguments that the two inventions and/or species are patentably indistinct, the inventions and species are understood to be distinct, and thus the restriction requirement is proper. As was very clearly noted in the original restriction requirement, the two inventions have acquired a separate status in the art, the search required for Group I is not required for Group II, and the inventions have acquired a separate status in the art because they are directed to divergent subject matter. Applicant has provided no evidence to contradict these points. Please note that the arguments of counsel cannot take the place of evidence in the record. *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965).
2. The requirement is still deemed proper and is therefore made FINAL.
3. Applicant has identified the claims which are generic or directed to the elected species as "at least" 23, 24 and 30-42 (see page 2 of the response). In view of the requirement that applicant precisely identify claims associated with an elected species (see the restriction requirement), the noted claims are deemed to be an accurate representation of the claims to be examined, and these are the claims which will be treated in the office action.

Specification

4. The abstract of the disclosure is objected to for the use of legal phraseology such as "means" (line 4), which should be avoided. Correction is required. See MPEP § 608.01(b), which clearly sets forth the requirements for an abstract of the disclosure.
5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

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6. The disclosure is objected to because of the following informalities: beginning at page 5 of the specification and continuing through the "Disclosure of the Invention" section, references to the claims (e.g., "the vehicle of claim 2 is based on the same of claim 1") should be deleted from the specification.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 23, 24, 35, 36, 39 and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohshita et al. (US 5,873,428). Ohshita et al. teach a vehicle having at least a front and rear wheel, with a frame supporting an engine (23), the front wheel (11) and rear wheel (17), the front wheel connected by a fork (19), the vehicle including a drive system wherein a hydraulic drive is provided for the front wheel-- including a pump (31), a motor (36), an accumulator (42), and connecting piping, the pump driven by the engine (24, 32, 33, 34, 35) the motor configured to drive the wheel (37, 38, 39, 41) with the accumulator providing a system pressure; the system having supply (43) and return (45) passages, with the accumulator and a filter (49) located in the return passage; the drive including a valve (47) which allows the wheel to be driven or to free-wheel (at which time it may run at any desired speed compared to the rear wheel since there is no drive connection to the front wheel in this condition), the wheel including a wheel shaft (63) mounted on the fork (19a, 19b) a cover (66) fixed with respect to the fork and providing an aperture in which the motor is mounted (e.g., at 68) wherein a portion of the motor output shaft (37) which extends back into the motor extends through the aperture; the wheel having an internal gear (39) the motor output shaft having a mating gear (38) which engages the internal gear; the internal hub portion of the wheel (proximate 59) having a generally cylindrical shape with a closed end (to the left in

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figure 6) and an opposite end which is closed by the cover (66), including a sealing arrangement (67), the wheel being supported on the shaft by two bearing assemblies (not referenced).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 33, 34, 37, 38 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohshita et al. (Cited above). The reference to Ohshita et al. is discussed above. As regards claims 33 and 34, the reference fails to specifically teach the use of either a bladder accumulator or a piston accumulator. Inasmuch as both types of accumulator are well known and interchangeable, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the accumulator taught by Ohshita et al. as either a piston accumulator or a bladder accumulator for the purpose of using a commonly available type of accumulator, for example the bladder accumulator in order to reduce weight overall, or the piston accumulator in order to avoid the additionally required poppet valve needed for the proper operation of a bladder accumulator. As regards claim 37, the reference to Ohshita fails to specifically teach a labyrinth seal on the peripheral surface of the cover, however in that a labyrinth seal is well known for assisting in the minimization of flow without providing further frictional rubbing between relatively moving parts, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a labyrinth seal on the cover in addition to the taught seal in order to provide a small further reduction in the material which may leak into the inner portion of the hub. As regards claim 38, the reference to Ohshita et al. fails to specifically teach that a portion of the shaft extends through the aperture from the motor to the gear. In that it is well known to make elements with moving parts accessible for repair, it would have been obvious to one of

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ordinary skill in the art at the time of the invention to mount the entire motor portion (36) externally of the cover (66) so as to facilitate easy repair of the motor without the need to disassemble the rest of the wheel mechanism. As regards claim 40, the reference to Ohshita fails to specifically teach both a needle bearing and a ball bearing. In that both needle and ball bearing are equally well known, and wherein a radial distance taken up by a needle bearing is reduced from that of a ball bearing, it is not considered to be beyond the skill of the ordinary practitioner to replace one of the ball bearings (e.g., the set closer to plate 66) with a needle bearing, for the purpose of increasing the free space inside the wheel hub area near the mounting of the closure plate, facilitating easier maintenance.

11. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohshita et al. in view of Taig (US 5,328,002). The reference to Ohshita is discussed above and fails to teach that the system includes a housing, wherein the filter and accumulator are contained in the housing. Taig teaches a hydraulic supply system for a vehicle system wherein an accumulator (30) is provided in the same housing as a filter (190). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the filter and accumulator taught by Ohshita in the same housing as taught by Taig, for the purpose of incorporating both elements (with particular noting that Ohshita's filter and accumulator are located one after the other in circuit) in a single enclosure, thus reducing the number of mounting elements needed to attach the system to the vehicle.

12. Claims 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohshita et al. in view of Taig and Bedenbender et al. (US 3,929,206). The references to Ohshita et al. and Taig are discussed above and fail to teach the arrangement of the accumulator and filter such that longitudinal axes of each are substantially parallel. Bedenbender teaches an arrangement wherein a filter (256) and a set of accumulators (264, 266, 268) are arranged side-by side (figure 8a, figure 9) having their respective longitudinal axes parallel to one another. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the arrangement of accumulator and filter of the vehicle of Ohshita et al. as modified by

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Taig, such that longitudinal axes of both elements are parallel, for the purpose of reducing space in the mounted assembly. As regards claim 32, the examiner takes official notice that the use of an exhaust pipe and muffler for an internal combustion engine on a land vehicle is very well known, and considered to be an inherent portion of the vehicle if taught to include an internal combustion engine. As regards the locating of the housing with the accumulator and filter proximate the muffler, it would have been obvious to one of ordinary skill in the art at the time of the invention to locate the accumulator and filter housing proximate a muffler (for example under a seat portion of the vehicle), for the purpose of allowing the housing to be placed in an otherwise unused space in the vehicle.

13. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohshita et al. in view of Heible (US 5,894,903). The reference to Ohshita is discussed above and fails to teach the system as configured to drive the front wheel at a speed less than that of the rear wheel. Heible teaches a hydraulic drive for a motorcycle wherein the front wheel is driven when the rear wheel runs in a range of 1% to 3% faster than the front wheel (col. 3, lines 32-42). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the drive system of the vehicle of Ohshita with the control for driving the front wheel when the rear wheel speed is greater, for the purpose of controlling the engagement of drive to the front wheel.

Conclusion

14. Applicant is reminded that claims 25-30 and 43-54 are withdrawn from consideration as being directed to a non-elected species and/or invention.
15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Frye (US 4,157,739), Heitman et al. (US 4,162,713), Stauffer (US 4,546,844), Sato (US 4,684,143), Schaefer (US 4,955,451), and Yamauchi (US 5,113,964) teach drive systems of pertinence.
16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to F. Vanaman whose telephone number is 703-308-0424. Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is 703-308-1113.

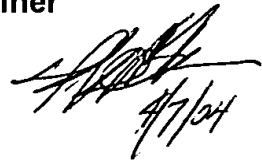
As of May 1, 2003, any response to this action should be mailed to:

Mail Stop _____
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450,

Or faxed to one of the following fax servers:

Regular Communications/Amendments: 703-872-9326
After Final Amendments: 703-872-9327
Customer Service Communications: 703-872-9325

F. VANAMAN
Primary Examiner
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4/7/04